

WHAT IS CLAIMED IS:

1. A method for treating or preventing tissue damage due to systemic inflammatory response syndrome comprising administering to an animal a therapeutically effective amount of a pyrimidine nucleotide precursor.

2. A method for treating or preventing sepsis comprising administering to an animal a therapeutically effective amount of a pyrimidine nucleotide precursor.

3. A method as in claim 2 wherein said pyrimidine nucleotide precursor is uridine, cytidine, orotic acid, or an acyl derivative of uridine, cytidine, or orotic acid, or a pharmaceutically acceptable salt thereof.

4. A method as in claim 3 wherein said acyl derivative of uridine is triacetyluridine.

5. A method as in claim 2 further comprising administering an inhibitor of uridine phosphorylase.

6. A method for treating or preventing sepsis comprising administering to an animal a therapeutically effective amount of an inhibitor of uridine phosphorylase.

7. A method for reducing toxicity of a therapeutic cytokine or inflammatory stimulus comprising administering to an animal a therapeutically effective amount of a pyrimidine nucleotide precursor prior to, during, or after administration of said cytokine or said stimulus.

8. A method as in claim 7 wherein said pyrimidine nucleotide precursor is uridine, cytidine, orotic acid, or an acyl derivative of uridine, cytidine, or orotic acid, or a pharmaceutically acceptable salt thereof.

9. A method as in claim 8 wherein said acyl derivative of uridine is triacetyluridine.

10. A method as in claim 7 wherein said cytokine or said stimulus is selected from the group consisting of interleukin 1, interleukin-2, interleukin 6, tumor necrosis factor, endotoxin, fungal polysaccharides, and double-stranded RNA.

11. A method as in claim 7 further comprising the step of administering an inhibitor of uridine phosphorylase.

12. A method for reducing toxicity of a therapeutic cytokine or inflammatory stimulus comprising administering to an animal a therapeutically effective amount of an inhibitor of uridine phosphorylase prior to, during, or after administering said cytokine or said stimulus.

13. A method as in claim 12 wherein said cytokine or said stimulus is selected from the group consisting of interleukin 1, interleukin-2, interleukin 6, tumor necrosis factor, endotoxin, fungal polysaccharides, and double-stranded RNA.

14. A method for treating cancer comprising administering to an animal a therapeutically effective amount

of a therapeutic cytokine or inflammatory stimulus and a therapeutically effective amount of a pyrimidine nucleotide precursor prior to, during, or after administration of said cytokine or said stimulus.

15. A method as in claim 14 wherein said pyrimidine nucleotide precursor is uridine, cytidine, orotic acid, or an acyl derivative of uridine, cytidine, or orotic acid, or a pharmaceutically acceptable salt thereof.

16. A method as in claim 15 wherein said acyl derivative of uridine is triacetyluridine.

17. A method as in claim 14 wherein said cytokine or said stimulus is selected from the group consisting of interleukin 1, interleukin-2, interleukin 6, tumor necrosis factor, endotoxin, fungal polysaccharides, and double-stranded RNA.

18. A method as in claim 14 further comprising the step of administering an inhibitor of uridine phosphorylase.

19. A method for treating cancer comprising administering to an animal a therapeutically effective amount of a therapeutic cytokine or inflammatory stimulus and a therapeutically effective amount of an inhibitor of uridine phosphorylase prior to, during, or after administering said cytokine or said stimulus.

20. A method as in claim 19 wherein said cytokine or said stimulus is selected from the group

consisting of interleukin 1, interleukin-2, interleukin 6, tumor necrosis factor, endotoxin, fungal polysaccharides, and double-stranded RNA.

21. A method for treating or preventing inflammatory hepatitis comprising administering to an animal a therapeutically effective amount of an acyl derivative of uridine, cytidine or orotic acid, or a pharmaceutically acceptable salt thereof.

22. A method as in claim 21 wherein said inflammatory hepatitis is due to viral infection.

23. A method as in claim 21 wherein said inflammatory hepatitis is due to autoimmune processes.

24. A method as in claim 21 wherein said inflammatory hepatitis is due to alcohol consumption.

25. A method as in claim 21 wherein said acyl derivative of uridine is triacetyluridine.

26. A method as in claim 21 including the further step of administering an inhibitor of uridine phosphorylase.

27. A method for treating or preventing inflammatory hepatitis comprising administering to an animal a therapeutically effective amount of an inhibitor of uridine phosphorylase.

28. A method for treating or preventing inflammatory hepatitis comprising administering to an animal a therapeutically effective amount of uridine or cytidine.

29. A method as in claim 28 wherein from 2 to 40 grams of uridine or cytidine are administered per day.

30. A method for treating or preventing hepatic damage in an animal receiving parenteral nutrition comprising administering intravenously to said animal a therapeutically effective amount of a pyrimidine nucleotide precursor.

31. A method as in claim 30 wherein said hepatic damage is due to said animal receiving parenteral nutrition.

32. A method as in claim 30 wherein said pyrimidine nucleotide precursor is uridine, cytidine, orotic acid, or an acyl derivative of uridine, cytidine, or orotic acid, or a pharmaceutically acceptable salt thereof.

33. A method as in claim 30 wherein from 2 to 40 grams of said pyrimidine nucleotide precursor are administered per day.

34. A method as in claim 30 including the further step of administering an inhibitor of uridine phosphorylase.

35. A method for treating or preventing hepatic damage in an animal receiving total parenteral nutrition comprising administering to said animal an inhibitor of uridine phosphorylase.

36. A method for treating or preventing hepatic damage in an animal receiving a liver transplant comprising administering to said animal a therapeutically effective amount of a pyrimidine nucleotide precursor.

37. A method as in claim 36 wherein said pyrimidine nucleotide precursor is uridine, cytidine, orotic acid, or an acyl derivative of uridine, cytidine, or orotic acid, or a pharmaceutically acceptable salt thereof.

38. A method as in claim 36 wherein from 2 to 40 grams of said pyrimidine nucleotide precursor are administered per day.

39. A method as in claim 36 including the further step of administering an inhibitor of uridine phosphorylase.

40. A method for treating or preventing hepatic damage in an animal receiving a liver transplant comprising administering to said animal an inhibitor of uridine phosphorylase.

41. A composition comprising:
a) an acyl derivative of a pyrimidine nucleotide precursor
and;
b) an inhibitor of uridine phosphorylase

42. A composition comprising:
a) an acyl derivative of a pyrimidine nucleotide precursor

and;

b) a purine nucleotide precursor.

43. A composition as in claim 42 where said pyrimidine nucleotide precursor is uridine, cytidine, or orotate.

44. A composition as in claim 42 where said purine nucleotide precursor is inosine, adenosine, or an acyl derivative of inosine or adenosine.

45. A composition comprising a parenteral nutrition formula and 2 to 40 grams of a pyrimidine nucleotide precursor per daily portion

46. A composition as in claim 45 wherein said pyrimidine nucleotide precursor is uridine, cytidine, orotic acid, or an acyl derivative of uridine, cytidine; or orotic acid, or a pharmaceutically acceptable salt thereof.

47. A method of providing nutrition to a mammal receiving nutrition intravenously comprising administering to said mammal the composition of claim 45.

48. A composition comprising

a) glucose, and

b) a pyrimidine nucleotide precursor.

49. A composition as in claim 48 wherein said composition is an aqueous solution containing 1 to 10 % glucose.

50. A composition as in claim 48 wherein said composition is an aqueous solution containing 5 % glucose.

51. A composition as in claim 48 wherein said pyrimidine nucleotide precursor is uridine or cytidine.

52. A method of treating a mammal during or after liver transplantation comprising administering the composition of claim 48.

53. A method for reducing the effects of ethanol intoxication comprising administering to a mammal in need of such treatment uridine, cytidine, orotic acid, or an acyl derivative of uridine, cytidine, or orotic acid, or a pharmaceutically acceptable salt thereof.

54. A method of treating ethanol intoxication comprising administering to an intoxicated mammal uridine, cytidine, orotic acid, or an acyl derivative of uridine, cytidine, or orotic acid, or a pharmaceutically acceptable salt thereof.

55. A method as in claim 54 wherein said administering step comprises administering triacetyluridine.

56. A method as in claim 54 wherein said administering step comprises administering uridine or cytidine.

57. A method of reducing inflammatory liver injury in an animal in need of such treatment comprising administering to said animal a therapeutically effective amount of an acyl derivative of uridine, cytidine or orotic acid, or a pharmaceutically acceptable salt thereof.